Naturalist Notebook
...CUT COLLEGE
...BRARY
...LONDON, CONN.
FE 6 '70

Thames Science Center

STACKS

FEB. 1970

NATURALIST NOTEBOOK

FEBRUARY 1970 VOLUME VI NO. 2

CONTENTS

Front Cover:
"Aftermath of an Ice Storm"
— Photo by R. Dewire

CHILDREN'S SECTION

Nature Calendar 1
Along The Shore 4
Footnotes To Nature 6

ADULT SECTION

Articles of Adult Interest 8
Your Own Nature Jaunt 10
Over-winter Pets 12
Christmas Count 13

THAMES SCIENCE CENTER, INC.
622 WILLIAMS STREET
NEW LONDON, CONNECTICUT 063[illegible]

OFFICERS:
Dr. Russell Sergeant — President
Mr. Henkle Scott — Vice President
Mrs. John Merrill — Secretary
Mrs. Robert Sullivan, Jr. — Treasurer

BOARD OF DIRECTORS:
Mrs. Robert Anderson
Mrs. Hugh Costello
Dr. Marion H. Hamilton
Mrs. John Kashanski
Dr. Edgar de N. Mayhew
Mrs. Francis F. McGuire
Mrs. John Merrill
Mr. J. Morgan Miner
Mrs. J.A. Michael Morse
Mrs. Elizabeth C. Noyes
Dr. William A. Niering
Lt. Cmdr. Bruce Patterson
Dr. Joseph Pereira
Mr. Gerard Rousseau
Dr. Russell Sergeant
Mr. Henkle Scott
Mr. Ralph A. Sturges III
Mrs. Robert Sullivan, Jr.
Atty. Robert Sussler
Mrs. Kenneth Talbot
Mr. Donald P. Ward

CONSULTANTS:
Mr. John F. Gardner
Dr. Richard H. Goodwin

SCIENCE CENTER DUES: Annual $5.00 Supporting $25.00
Family $10.00 Organization $10.00 Annual Patron $50.00
Junior (Under 16) $3.00
Contributions are tax deductible

FEBRUARY

The Month Of Tree Colors And Shapes

February is the month of tree shapes and colors. Without leaves a tree can still be both beautiful and easy to identify.

Color often is a way to tell a tree in winter. The white trunk of the gray birch is a most obvious example, but there are other things to look for. The sycamore in winter looks like a diseased or dying tree with its pattern of dark outer bark and light inner bark both exposed as you look toward the top of the tree. The red maples have the tips of their branches red in color so that a large number of them all together gives the whole area a reddish tinge. Willows are very yellow in color and readily stand out alongside other trees. The very light gray beech will also be quickly noticed in among darker oaks and birches.

Photo by R. Dewire

Sycamore Tree

Tree shapes are also very helpful to identification. Pin oaks tend to have their lower branches all drooping, while the branches in the upper half of the tree all turn upward.

Photo by R. Dewire

American Elm

Our beautiful but fast disappearing American elm trees have a most characteristic form. The trunk rises with no branches coming off it until it suddenly divides into smaller trunks which go off at angles reaching in all directions. This gives elm trees the shape of a vase. Sugar maples are very often oval or egg-shaped, while the top of the flowering dogwood is spread out.

To see these characteristic shapes, you must find trees that are not being crowded out by other trees. Trees coming up in a field or along city streets often give the best shapes. In the city these trees may be horribly altered in shape by cutting to allow power line to go through them.

Watch for these trees next time you are out for a drive. Leaves are not the only thing to give away a tree's name.

FEBRUARY'S CALENDAR

February is the month of deep snows and north winds.

February 2... Ground Hog Day -- A shadow means more winter ahead.

February 6... The days are lengthening; the sun now sets at 5:05 P. M.

February 7... Tides this morning will be at their highest.

February 8... Brant -- the small goose that prefers salt water to fresh -- begin to arrive in small flocks.

February 9 - 14... If you own a sundial, this is the time when they will be most accurate.

February 11... Pine groves may hold a roosting long-eared owl.

February 15... The common redpolls staged a major invasion at feeders last year -- will they return this year?

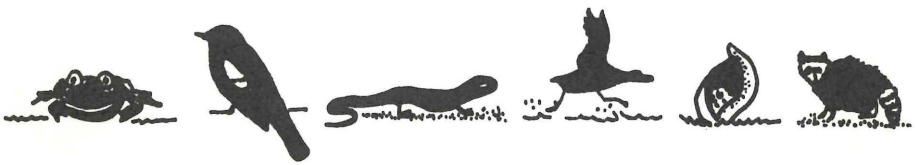
February 17... Great horned owls are beginning to nest. Listen for hooting $\frac{1}{2}$-hr. before dawn and $\frac{1}{2}$-hr. after dusk.

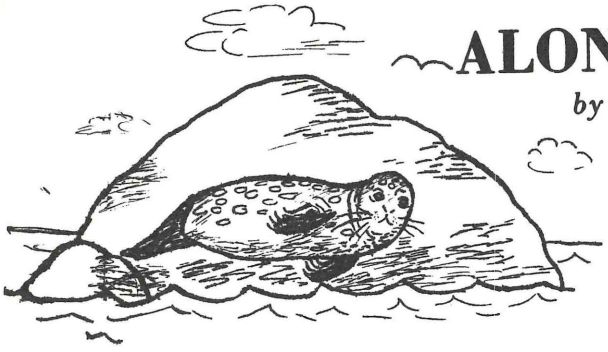
February 21... The full Snow Moon which will be partially eclipsed (only 5%) at 3:02 A. M.

February 25... Red-necked grebes, larger than the horned grebes and with a yellow rather than black bill, arrive along the coast.

February 27... Duck begin courtship displays of head bobbing and aerial chases.

February 28... Now the sun doesn't set until 5:33 P. M.





ALONG THE SHORE

by BARBARA KASHANSKI

The Harbor Seal

If you take a trip along the shore during these cold winter months you might see a large, shapeless animal lounging on the rocks offshore. Look closely -- it might be the Harbor Seal. (Phoca vitulina)

The Harbor or Leopard Seal is about five feet in length and is either yellowish with brown spots or brown with yellowish spots. Its spots give it the name of Leopard Seal. The Harbor Seal is found both along the Atlantic and Pacific coasts as far south as the Carolinas and north to the Arctic.

All seals (and Walrus) belong to a group called Pinnapeds, which means fin-footed. This group of animals has been traced back as far as 25,000,000 years ago! The ancestors of our present day seals were probably as much at home on land as in the water. But as these mammals became more adapted to a water environment their limbs went through a strange change. These changes of course took many thousands of years. This is what happened. The leg bones, both upper and lower, became shorter and shorter. At the same time the front and hind feet became longer and longer and a web of skin grew between the toes until finally a flipper or fin was developed.

There are two different groups of seals. The Harbor Seal belongs to the group called Hair, Earless, or True Seals. Members of this family (Phocidae) have coarse hair, no external ears, very short necks, and their front limbs are much shorter than their hind limbs.

The other group of seals is the Eared seals. Sea lions and fur seals belong to this group. The Eared seals can bring their hind legs around in a forward position when resting on land, but the Earless or True seals don't make out so well. They cannot turn their hind limbs forward at all! They can barely move on land because of this and are extremely clumsy when they try.

Why do seals and walrus still have legs for land travel while in every other way they are best made to live in the water? The reason is because all fin-foots must leave the water to breed and to raise their young. Therefore they must have some support for their large bodies on land. To make up for their awkwardness and clumsiness on land, seals are very graceful and powerful swimmers. They can dive to considerable depths and can stay underwater a fairly long time. Harbor seals have been recorded as staying submerged for 15 minutes.

The enemies of seals are polar bears, sharks, and man. The fur of the harbor seal is not valued so they escape slaughter for this reason, but fisherman are not at all happy with this fin-footed animal. Fish being a favorite food, seals rob the catch in fishermen's nets and often destroy the nets in doing so.

Try looking for these seals along the coast, especially toward Rhode Island. At Latimer's Point in Stonington you can almost always see a seal sprawled on offshore rocks.

FOOTNOTES TO NATURE

by MARY JEAN DEWIRE

THE MUTE SWAN

Most of us at one time or another have probably stopped to admire the beautiful swans that flock together in our coves and rivers during the winter. But did you know that until quite recently these birds were for the enjoyment of a few people?

The mute swan is not a native species, but was introduced from Europe. Actually, this swan is not "mute" for it does make a hissing sound when angry and calls its young with a noise that sounds like the bark of a small dog. But compared to the loud resonant noises of the other species of swans, this bird is indeed "mute." The male swan is called a cob, the female a pen, the first year young cygnets, and young in the second year grey birds.

In England the swan is regarded as a royal bird, and following an ancient custom that dates back to 1482, no person can own one without permission from the Crown. With this privilege of ownership, the Crown also grants a "swan-mark" which is a letter or some other symbol cut into the upper mandible of the bird. To this very day the swans on the Thames belong to the royal family and two city companies, each having their own swanmark. Every year the swans are taken from the water, the cygnets marked and the older birds remarked if necessary. The catching and marking of these swans is known as "swanupping" and is conducted with quite a bit of ceremony by the Swan-uppers or Swan-hoppers who wear a special uniform.

Photo by R. Dewire

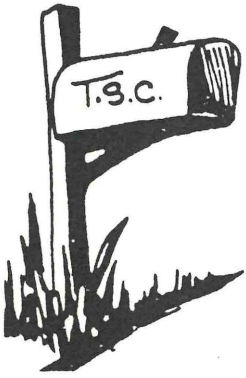
Around the turn of the century, the mute swan was imported from England to grace the ponds of the great estates of Newport and Southampton. For many years this bird was seen only in domesticated flocks on selected park lakes or private ponds. In the early 1940's however some of these birds successfully broke away and established themselves in the wild state. They are the only swans breeding in the eastern United States, preferring fresh water marshes and lakes. Their range now extends from southern Massachusetts to northern New Jersey, and they winter even further southward along sheltered seacoasts when frozen out of the more northern areas.

Swans live to a ripe old age and some birds are reported to have reached from 50 to 100 years, although a more common age is 30 to 40 years.

Locally, the Rhode Island Audubon Society has undertaken a banding project to determine the age and range of these swans. Colored bands are placed around the swans' necks for easy identification, and many of you have probably seen a swan with a red, yellow, green, orange, or black band around his neck, depending on which area he was banded in.

As beautiful and graceful as the swans are they can, in fact, be quite dangerous. There are records in England of the domesticated swans of the parks attacking young children and dogs who approached too closely and dragging them into the water and killing them. So it is best to admire these birds from a safe distance.

ARTICLES OF ADULT INTEREST



We welcome notice of Conservation activities or problems for inclusion in this section of the Naturalist's Notebook. . . . Please let us know of your local activity so that others may be aware of your efforts and lend their support where possible. . . . .

OUR NEWSLETTER: Due to an increase in printing costs of our monthly Naturalist Notebook we are going to have to reduce it to ten issues a year instead of twelve. The double issues will come in the summer months of June-July and August-September. We feel that it is better to make the reduction in this way rather than make the magazine smaller and reduce its quality.

CARDINAL -- TITMOUSE CENSUS: The annual Cardinal - Tufted Titmouse Census will be held the weekend of Feb. 14th and 15th. This census is conducted in all the New England States and in Connecticut is sponsored by the Connecticut Conservation Association. Special cards for this census are used and may be obtained for the asking from the Conn. Conservation Association, Pequot Sepos Road, Mystic, or from the Science Center. Connecticut should have a greater number of these two birds than any other New England State since we are southernmost. We do need everyone's support to show this so get your cards and help out.

WHOOPING CRANES: A record number of 55 whooping cranes arrived for the winter at the Aransas Wildlife Refuge in Texas. This total is up 5 birds from last year. Offshore shell dredging in San Antonio Bay close to the refuge is creating a serious hazard to the continued protection of these birds. The National Audubon Society has

filed a lawsuit in Federal Court for an injunction in an effort to halt the dredging.

FRIENDS OF THE SCIENCE CENTER: The Center has established a new category of membership. It is called Friends of the Science Center. This membership is $50.00 a year and goes toward the operating expenses of the Center. The following people are currently Friends: Mrs. William Boyd, Mr. William Morgan, Mrs. John Crosby Brown, Mrs. Francis McGuire, Mrs. Ralph Wadleigh, Mr. Robert English, Jr., Mrs. Edward P. Williams, Dr. John B. Chadwick, Miss Ruth Dieffenbach, Mr. Paul Waldron, Mrs. Cornelius Rhoads, and Miss Ruth Thomas. We hope to increase the membership in this category and invite any of you who are interested to join.

CHRISTMAS COUNTS: Results of the five coastal Connecticut Counts are as follows: New Haven had a whopping 122 species to lead not only Connecticut, but also all of New England. Westport had 111 species for second place. Third was Lyme-Saybrook with 103 species, and New London and Greenwich-Stamford each had 98 species. See page 16 for the Lyme-Saybrook and New London Count results.

CLEANING UP OIL SPILLS: A Canadian Defense Research Laboratory has created and successfully tested a machine that literally "licks" oil spillage off the surface of the water at a rate of 30 gallons per minute. The unit that was demonstrated was only 6 feet wide and operated by a $3\frac{1}{2}$ horsepower motor, yet it could pick up better than 43,000 gallons of oil per day. A Canadian industry has expressed interest in putting the machine into production. If this machine turns out to be as successful as early tests seem to indicate, it could prove to be an excellent weapon against oil spills.

YOUR OWN NATURE JAUNT

by BOB DEWIRE

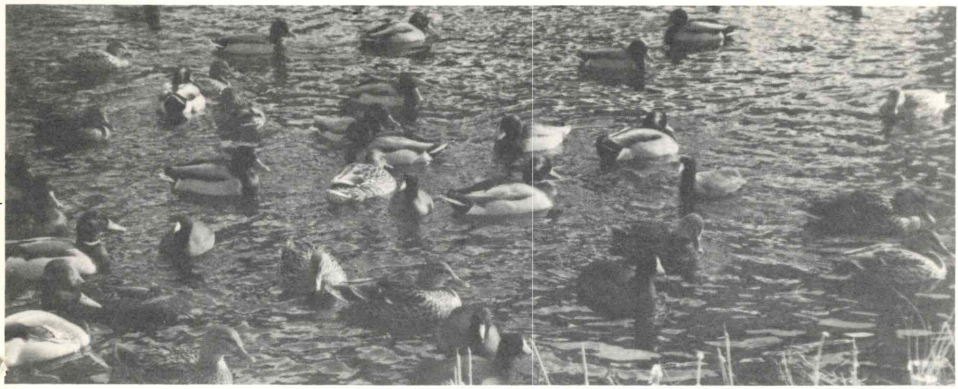
FALMOUTH, CAPE COD AREA

A trip to the Falmouth area of Cape Cod can be a pleasant trip even for the casual birder or amateur naturalist. Take Route 195 to Providence and then take the exit for Cape Cod (Route 195). Stay on this route until you pick up Route 6 in New Bedford, Mass. This will bring you to the Cape. Once you cross the Cape Cod Canal, take a right onto Route 28 which will bring you to the main street of the town of Falmouth. Take a left onto the street and watch on your right for the town hall which is set back off the road. Park in the town hall parking area and walk behind the building and down to the edge of a pond.

This pond, called Sider's Pond, is for some reason a remarkable gathering place for many species of wintering waterfowl. At close range you can have relaxed and excellent views of numbers of ring-necked ducks, greater and lesser scaup, canvasbacks, and mallard and black ducks. Canada geese are also present along with smaller numbers of baldpate, hooded mergansers and ruddy ducks. Coot are also quite numerous. The closeness of the birds makes it an ideal spot for the nature photographer. Even a small telephoto lens will produce handsome photographs as they swim by as close as 30 feet.

The past few years, the highlight of this spot has been the arrival of a male tufted duck, a European species rarely seen in this country. Looking very much like a ring-necked duck, the top of its head has extra long feathers

Photo by R. Dewire



The Coot and Mallard are common birds at Sider's Pond.

drooping down it, giving the bird the appearance of having a cow-lick. If it is windy the feathers blow about and make him easy to spot in the flocks of other ducks.

After viewing the pond leave the parking lot and turn right on the main street again. Take your first right and drive to the end of the road. Turn right and drive along the coastline. Common loons, horned grebes, common goldeneyes, red-breasted mergansers, scoters and common eiders may all be visible along here. The sand should be watched for horned larks and snow buntings.

After the coast is checked, return to Falmouth and get back on Route 28 heading north. Take a right onto Route 151 and after a short time watch for signs on the left for the Ashumet Holly Reservation, a Massachusetts Audubon Sanctuary. Park in the parking lot and take the trail through the woods. Every variety of holly imaginable is here -- an entire forest of them -- some very sizeable trees. Many will be filled with berries even into late winter. Numbers of robins stay here all winter having the berries for a food supply. Quail, ruffed grouse, hermit thrush, and bluebirds also can be regularly found.

The combination of the land birds, sea birds, and those at the pond make for a very interesting bird list at the end of the day.

*On Keeping Reptiles and Amphibians Over Winter**

by MIKE WALKER

FOOD

Probably no reptile or amphibian is as mis-fed as the turtle. Dried commercial turtle foods are nearly valueless. Hamburger, which is all fat and muscle tissue, is also a poor diet. If you must feed a turtle store bought meat, liver is the best choice. Even better are natural foods like earthworms and small fish. Again, fillets or gutted fish are not a satisfactory substitute for a whole minnow chopped up. In addition, almost all turtles like a few greens occasionally. These may be leaves of romaine, spinach, or kale, if pond plants are not available.

As I learned recently, if a turtle fails to respond to even the most tempting natural foods, sometimes its appetite can be stimulated by giving it a little cod liver oil. The oil can be swabbed on the animal's jaws daily.

Frogs, toads, and salamanders feed on live insects and other invertebrates and providing for them is usually no problem during warm weather. Keeping them successfully through the winter calls for maintaining a tub of earthworms or a mealworm colony in your basement. Mealworms are not really a satisfactory diet for an extended period of time. For nutritional reasons they should be supplemented by other food. More seriously, sometimes the horny or chitonous part of the mealworm's body tends to build up in the intestinal tract of the animal to which they are being fed, leading to possibly fatal blockage.

There is no guaranteed approach to keeping reptiles and amphibians healthy during the long winter, but proper temperature and diet are probably the two most important considerations.

CHRISTMAS BIRD COUNT 1969

New London and Lyme-Saybrook held their annual Christmas Counts again this year. The 15-mile diameter circle for New London goes from Mason's Island west to Rocky Neck State Park while in Lyme-Saybrook the circle goes from Hawk's Nest Beach to Hammonassett State Beach in Madison.

Lyme-Saybrook held its census on Monday, December 22nd in a driving rainstorm which lasted until 3:00 P. M. Forty-six people stuck it out however, and the final tally was 103 species.

The New London Count had to be postponed from its original date of Dec. 27th to Sunday, Dec. 28th. Although it was clear, a roaring northwest wind of 30+ MPH made birds hard to find and 24 people ended the day with 98 species. A record high contribution of 65 feeder reports gave the count some impressive numbers of feeder birds.

Below is the list for each count.

SPECIES	NEW LONDON	LYME SAYBROOK
Common Loon	2	8
Red-throated Loon	-	21
Horned Brebe	35	45
Pied-billed Grebe	9	11
Great Cormorant	47	2
Double-crested Cormorant	2	-
Great Blue Heron	12	1
Black-cr. Night Heron	4	-
American Bittern	-	4
Mute Swan	194	30
Canada Goose	171	44
Mallard	567	168
Black Duck	649	422

SPECIES	NEW LONDON	LYME SAYBROOK
Gadwall	3	16
Pintail	2	6
Green-winged Teal	-	2
Baldpate (Am. Widgeon)	76	33
Redhead	4	-
Canvasback	410	-
Greater Scaup	902	458
Lesser Scaup	3	5
Common Goldeneye	126	64
Bufflehead	300	89
Oldsquaw	12	22
White-winged Scoter	4	406
Surf Scoter	3	74
Common Scoter	-	1
Ruddy Duck	-	21
Hooded Merganser	61	-
Common Merganser	2	23
Red-breasted Merganser	155	55
Red-tailed Hawk	3	3
Red-shouldered Hawk	4	1
Bald Eagle	-	1
Marsh Hawk	1	5
Sparrow Hawk	9	10
Ruffed Grouse	5	10
Bobwhite	57	4
Ringe-necked Pheasant	8	5
King Rail	-	1
Clapper Rail	-	2
Virginia Rail	-	6
Sora	1	1
Coot	169	35
Killdeer	3	9
Black-bellied Plover	-	2
Ruddy Turnstone	-	3
American Woodcock	-	1
Common Snipe	1	2
Purple Sandpiper	54	16
Dunlin	6	-

SPECIES	NEW LONDON	LYME SAYBROOK
Black-backed Gull	94	106
Herring Gull	2,861	2,946
Ring-billed Gull	20	196
Bonaparte's Gull	-	92
Mourning Dove	478	212
Screech Owl	-	2
Barred Owl	1	-
Long-eared Owl	1	-
Short-eared Owl	1	-
Belted Kingfisher	9	4
Yellow-shafted Flicker	11	23
Yellow-bellied Sapsucker	-	2
Hairy Woodpecker	33	12
Downy Woodpecker	97	60
Horned Lark	18	58
Blue Jay	359	286
Common Crow	299	153
Black-capped Chickadee	576	512
Brown-capped Chickadee	1	1
Tufted Titmouse	159	126
White-breasted Nuthatch	88	63
Red-breasted Nuthatch	11	1
Brown Creeper	4	3
Winter Wren	-	3
Carolina Wren	-	4
Long-billed Marsh Wren	-	10
Mockingbird	14	18
Catbird	1	5
Brown Thrasher	8	2
Robin	53	68
Hermit Thrush	9	3
Bluebird	8	24
Golden-crowned Kinglet	4	19
Ruby-crowned Kinglet	6	3
Water Pipit	1	-
Starling	2,904	1,781
Myrtle Warbler	17	7
House Sparrow	763	869

SPECIES	NEW LONDON	LYME SAYBROOK
Eastern Meadowlark	72	19
Red-winged Blackbird	84	140
Yellow-headed Blackbird	1	-
Rusty Blackbird	1	15
Common Grackle	397	40
Brown-headed Cowbird	2,406	181
Cardinal	208	121
Evening Grosbeak	740	116
Dickcissel	2	-
Purple Finch	141	11
House Finch	152	35
Pine Grosbeak	-	13
Common Redpoll	5	-
Pine Sisken	159	-
American Goldfinch	135	20
Red-Crossbill	5	-
Towhee	74	8
Savannah Sparrow	14	59
Vesper Sparrow	2	1
Slate-colored Junco	697	444
Tree Sparrow	394	567
Chipping Sparrow	3	-
Field Sparrow	89	97
White-throated Sparrow	317	212
White-crowned Sparrow	-	2
Fox Sparrow	75	32
Swamp Sparrow	3	64
Song Sparrow	241	298
Lapland Longspur	-	3
Snow Bunting	61	10
TOTAL SPECIES	98	103
TOTAL INDIVIDUALS	19,474	12,330

Both counts were well under last year's totals with the weather being the major factor. Last year Lyme-Saybrook had 112 species and New London had 106.

It will be interesting to compare next year's results to these if weather conditions are more favorable.

ACTIVITIES FOR FEBRUARY

February 14... 8:00 A.M. Old Saybrook -- Old Lyme field trip to the shore to look for wintering waterfowl and hawks. Meet at the Terra Mar Inn parking lot in Saybrook.

February 15... 3:00 P.M. Family Film Festival. Held at Lyman Allyn Museum Auditorium. Film will be Walt Disney's "White Wilderness". Free admission to Center members. Non-members fee 50¢.

February 21... 10:00 A.M. A Junior Workshop for members in Grades 1, 2, and 3. "How Plants Grow". Registration required. Limit 10 children. No fee.

February 28... 8:00 A.M. Rhode Island Shoreline. A field trip to some of the best birding spots along Rhode Island from Watch Hill to Galilee. Meet at the Watch Hill parking lot.

We Need Your Active Membership and Support

THAMES SCIENCE CENTER

622 WILLIAMS ST., NEW LONDON, CONN. 06320

Phone: 443-4295

Annual dues: 12 months from _____

Name .....

Street ..... City .....

Phone ..... Zip Code .....

CLASSES OF MEMBERSHIP

- ☐ Annual $5 (each adult member of family)
- ☐ Family $10
- ☐ Supporting $25
- ☐ Annual Patron $50
- ☐ Organization $10
- ☐ Junior (under 16) $3
- ☐ A special gift toward support of the Science Center effort is included $_____

Please make checks payable to The Thames Science Center
Contributions are tax deductible

NATURALIST NOTEBOOK

Published by the

THAMES SCIENCE CENTER

622 Williams Street
New London, Connecticut 06320

Copyright © 1970

ROBERT C. DEWIRE – *Naturalist*
MICHAEL WALKER – *Curator*

The NATURALIST NOTEBOOK is published 10 times yearly. Subscription available through membership only.

The Thames Science Center is a nonprofit organization seeking a quality environment through education.

The active support of children and adults in the Science Center, its programs, activities and efforts is earnestly solicited.

ROBERT DEWIRE
Editor

Non-Profit Org.
U.S. Postage
P A I D
Quaker Hill, Ct.
Permit No. 9

THAMES SCIENCE CENTER
622 Williams Street
New London, Connecticut 06320

PALMER LIBRARY
CONNECTICUT COLLEGE
NEW LONDON, CONN. 06320

RETURN REQUESTED

Breakfast is Served on the Snow

Photo by Tony Degange